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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,516	02/02/2000	Peter F. Zalud	SAR 12165	6354

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RATNERPRESTIA  
P.O. BOX 980  
VALLEY FORGE, PA 19482-0980

EXAMINER

AHN, SAM K

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 03/11/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/496,516

Applicant(s)

ZALUD ET AL.

Examiner

Sam K. Ahn

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on req. for reconsideration, 12/31/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-24 is/are allowed.
- 6) ☒ Claim(s) 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 12/31/03 have been fully considered but they are not persuasive. Applicants remark (on p.3) that Giles et al. (Giles) do not teach all the limitation in claim 15. The examiner respectfully disagrees and maintains the rejection with further explanation that Giles teaches all the limitation claimed. Applicants argue that Giles does not teach the limitation of the counter means for increasing or decreasing a count value when the first signal received includes a first or second data value.

One may view the output of the XOR gate (14) as the first signal, which was derived from LSI signal. The output of XOR gate is inputted to the counter (18) having a first data value (CS) and a second data value (/CS) which is a different value from the first data value, and counting up or down depending on whether the first signal has a first data value or a second data value. (note col.4, lines 25-27) In regards to the applicants' argument on LS1 and LS2 signals, one may interpret that the LS1 and LS2 being equal or not to determine the counter from increasing or decreasing the count value are determined based on the output of the XOR gate, 14, which may be interpreted as the first signal. Therefore, Giles teaches the limitation wherein the first signal (output of XOR gate, 14) including the first data value (CS) and the second data value (/CS) counts up or down depending on the data value received.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Giles et al. ('064).

Regarding claim 15, Giles discloses a data demodulating apparatus comprising receiving means (14 and 15 in Fig.1) receiving a first signal (output of XOR gate, 14) including a first data value (High) and a second data value (Low) where the resultant signal received by Up-down counter is CS and /CS signal. The up-down counter increases a count value when the first signal includes the first data value, CS signal, and decreases a count value when the first signal includes the second data value, /CS signal. Data means and signal generating means (17) produces a third data value when the count value is equal to a first threshold value (reaching the S-state, see Fig.2) and a fourth data value when the count value is equal to a second threshold value is equal to a second threshold value (reaching the M-state, see Fig.2). The output signal is illustrated in figure 2 in EDO line. As S-state is reached, the EDO goes to a different state

(to a low state) and changes its state when M-state is reached (to a high state).

(note col.3, line 61 – col.4, line 59)

The limitation of “equal to or greater (or less) than” is interpreted as meeting either ‘equal to’ OR ‘greater than’ where Giles teaches the limitation of being “equal to” a threshold. It is not interpreted as meeting both conditions.

Regarding claim 16, Giles teaches all subject matter claimed, as applied to claim 15. Giles further teaches all elements including the counter means, the data means and the signal generating means comprised in a filter. (see 16 in fig.1) and (note col.4, lines 10-59)

Regarding claims 17 and 18, Giles teaches all subject matter claimed, as applied to claim 15. Giles further teaches the counter means including means for preventing the counter from exceeding a maximum and minimum values (S-state and M-state). (note col.4, lines 39-59)

### ***Allowable Subject Matter***

3. Claims 19-24 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:

Present application discloses a decoder comprising an integrator and a discriminator. The claims recite a discriminator comprising receiving means, counter

means and clock synchronization means, as recited in claim 19. Prior arts, Sekigawa in view of Nimishakavi, do not teach or suggest in combination of all the limitation recited. Prior art does not teach the limitation where the counter increases when first data value in a first signal is received and reset count value upon receiving a second data value. And further, a clock synchronization signal is produced when the count value in the counter is greater than or equal to a first threshold value.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Sam Ahn** whose telephone number is **(703) 305-0754**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at **(703) 305-4714**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

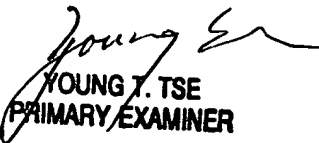
**or faxed to:**

**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Sam K. Ahn  
3/3/04

  
YOUNG T. TSE  
PRIMARY EXAMINER